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## (54) OPTICAL PULSE MODULATOR

## (57) Abstract:

PROBLEM TO BE SOLVED: To prevent deterioration in a transmission characteristic by keeping a relative phase between a data signal and an optical pulse optimizingly.

SOLUTION: Part of an emission optical pulse train 12 from a data modulator 1 modulating an incident optical pulse train 11 based on a data signal 14 synchronously with a clock signal is branched by a photocoupler 2 and made incident to an electric field absorption modulator 3 and a controller 4 is used to control a phase shift of a variable phase shifter 5 based on a modulation optical current 15 from the electric field absorption modulator 3. Thus, the phase of the data signal 14 is controlled to optimize the relative phase between the data signal 14 and the incident optical pulse train 11.

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